

1. (Amended Once) A method of communicating phenotypic and genotypic data related to a non-human animal, the data communication being between a central database processing resource and at least one remote user, the method comprising the steps of:

receiving an access request message from a remote user via a communications link;

transmitting an access enabling message to the remote user via the communications link wherein the remote user is authorized to access the database, the access enabling message permitting the remote user to access the database and access designated data from the database, the data in the database including phenotypic and genotypic data related to the animal;

analyzing the phenotypic and genotypic data related to the animal;

compiling a report based on the analysis of the phenotypic and genotypic data of the animal; and

transmitting the compiled report of the phenotypic and genotypic data of the animal to the remote user.

2. (Amended Once) The method of claim 1, including periodically updating the database with at least one phenotypic or genotypic data about the animal.

3. (Amended Once) The method of claim 1, including interpreting the phenotypic and genotypic data the animal thereby predicting health, disease probabilities, disorder probabilities or longevity of the animal.

4. (Amended Once) The method of claim 1, including sending an access request message from the remote user via a communications link, and the communications link is selectively a computer network.

5. (Amended Once) The method of claim 1, including receiving a biological specimen result of the animal, storing, retrieving, comparing, and analyzing the biological specimen thereby obtaining phenotypic data of the animal.

6. (Amended Once) The method of claim 1, including encrypting the phenotypic and genotypic data.

13. (Amended Once) The method of claim 1, including the steps of communicating between a remote user and the central database processing resource through a computer network, providing credit card information of the remote user prior to providing at least one of phenotypic or genotypic data of the animal and transferring such data to the remote user after charging a credit card for such data.

A 14 B 1 14. (Amended Once) A method of viewing phenotypic and genotypic data related to a non-human animal comprising the steps of:

viewing, using a computer, both phenotypic data and genotypic data for a non-human animal,

analyzing, using a computer, the phenotypic data and the genotypic data based on predetermined characteristics; and

reporting the analysis of the phenotypic data and genotypic data.

15. (Amended Once) The method of claim 14, including receiving in a database of a central database processing resource related to the computer, data relating to the phenotype data of the animal and receiving in the database of the central data processing resource, genotypic data relating to the breed of the animal and background of the animal.

16. (Amended Once) The method of claim 14, wherein a remote user of a database including phenotypic data and genotypic data pays for at least one of an analysis of phenotypic or genotypic data through a computer network, and including submitting the report to a remote user after receipt of the payment.

17. (Amended Once) Apparatus for communicating phenotypic and genotypic data related to a non-human animal, comprising

a computer communication network for data communication being between a central database processing resource and at least one remote user,

means for receiving an access request message from a remote user via the communications link;

means for transmitting an access enabling message to the remote user via the communications link wherein the remote user is authorized to access the database, the access enabling message permitting the remote user to access the database and access designated

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data from the database, the data in the database including phenotypic and genotypic data related to the animal;

means for analyzing the phenotypic and genotypic data related to the animal;

means for compiling a report based on the analysis phenotypic and genotypic data of the animal; and

means for transmitting the compiled report of the phenotypic and genotypic data of the animal to the remote user.

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24. (Amended Once) The apparatus of claim 19, including means for interpreting the phenotypic and genotypic data, and means to permit an analysis of the interpreted data thereby predicting health, disease probabilities, disorder probabilities or longevity of the animal.

25. (Amended Once) The apparatus of claim 19, including means of communicating between a remote user and the central database processing resource through a computer network, means for providing credit card information of the remote user prior to providing at least one of phenotypic or genotypic data and transferring such data to the remote user after charging a credit card for such data.

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26. (Amended Once) Apparatus comprising
a screen for monitoring, using a computer, both phenotypic data and genotypic data for a non-human animal,
a computer for analyzing the phenotypic data and the genotypic data based on predetermined characteristics; and
a communications network for reporting the analysis of the phenotypic data and genotypic data.

27. (Amended Once) The apparatus of claim 26, including means for receiving in a database of a central database processing resource, phenotypic data relating to the health assessment of the animal and receiving in the database of the central database processing resource, genotypic data relating to the breed of animal and the genetic background of the animal.

APB3 29. (Amended Once) A computer readable medium having stored thereon instructions for a computer to access the medium comprising:

Pub *29* instructions to access data on the medium,
a database on the medium related to genotypic data of a non-human animal, and
a database on the medium related to phenotypic data of the animal.

29 30. (Amended Once) The medium as claimed in claim 29 wherein the phenotypic data includes biological laboratory test data relating to a health assessment of the animal.

30 31. (Amended Once) The medium of claim 30, including analysis data of the phenotypic and genotypic data related to the animal, and a report based on the analysis data.

32. (Amended Once) The medium of claim 30; including data related to the interpretation of the phenotypic and the genotypic data of the animal, wherein the interpreted data predict health, disease probabilities, disorder probabilities or longevity of the animal.

31 33. (Amended Once) The medium of claim 29, including data for permitting communication between a remote user and a central database processing resource through a computer network, data for permitting access through approved access codes, such data selectively including a credit card information of a user prior to providing a communication access to the database storage system of at least one of phenotypic or genotypic data.

32 34. (Amended Once) A system for reporting the analysis of phenotypic data and genotypic data of a non-human animal comprising:

a computer based communications network,
a computer at a central database processing resource provider to receive through the network, phenotypic data for the animal, the phenotypic data including physical characteristics and health assessment data, and genotypic data about the animal the genotypic data including genetic background, genomic mapping and genetic screening data,

a screen for monitoring, using a computer, both the phenotypic data of the animal, and the genotypic data about the animal,

a computer for analyzing the phenotypic data and the genotypic data based on predetermined characteristics, and

a computer for receiving, through the network, the analysis.

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35. (Amended Once) The system of claim 34, including receiving in a database of a central database processing resource, phenotypic data relating to a health assessment of the animal and receiving in the database of the central data processing resource, genotypic data relating to the genomic map, genetic background, and genetic screening information about the animal.

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36. (Amended Once) The system of claim 34, including permitting a remote user of the network to pay for an analysis of phenotypic and genotypic data through the computer network, and including permitting the computer communications network to submit the report to the remote user after receipt of the payment.

Please add the following new claim:

A8 10 37. The method of claim 9, wherein the computer network includes the Internet.